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EXAMINER

DIEP, NHON THANH

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/733,493	Applicant(s) TERADA ET AL.	
	Examiner Nhon T. Diep	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 7/9/2008 have been fully considered but they are not persuasive.

With regard to the applicants' argument that: Applicants respectfully submit that this is not a fair or logical reading of Figure 3. Step 15 is a three-way decision step. Step S15 is labeled "MOVING OBJECT DETECTED OR TIME-OUT?". The three branches are clearly labeled. The first branch is labeled "NO," which means that no moving object was detected. In this case, the process loops back to Step S14. The second branch (beneath the box) is labeled "DETECTION OF MOVING OBJECT." If a moving object was detected, the process proceeds to Step S16. The third branch is labeled "TIME-OUT," which means that a predetermined count of NO loops to Step S14 has occurred. In this case, the process proceeds to Step S20. As explained in the specification:

[0046] The controller 32 makes a determination as to whether or not the moving-object has been detected in the moving-object detector 31, and also makes a determination as to whether or not a predetermined counted value has been reached through the counting operation so as to make a determination as to time-out (step S 15). Herein, when no moving-object has been detected without time-out, the moving-object detection process (step S 14) are repeatedly executed. In contrast, upon receipt of the information that any moving object has been detected, the sequence proceeds to step S16, while in the case of the time-out, the sequence proceeds to step S20.

Art Unit: 2621

The limitation of claim 1 in question currently reads: a determining unit which determines that said trigger signal is a valid signal when said detector detects no change in the images within a predetermined time from the input of said trigger signal to said signal input unit; and ...

If no movement is detected in a predetermined time a TIMEOUT occurs and process branches to Step S20. If the TIMEOUT is determined to be abnormal in step S20, the trigger signal is determined to be valid at Step S21. Therefore, a determining unit as claimed in Claim 1 is fully described in the specification. Claims 3, 6-8, 10, 11 include this limitation by dependency from claim 1, and are thus also fully supported. Claim 16 includes a limitation of "determining said trigger signal is a valid signal when no change is detected in the images within a predetermined time from the input of said trigger signal." As noted, this step is clearly supported by the specification. Claims 17 and 18 include this limitation by dependency from claim 16, and are also fully supported.∴.

First of all, the examiner totally agrees that "Step 15 is a **three-way decision step** as argued, and they are completely separated steps. It is, however, respectfully submitted that it is not fair to interpret that **"The third branch is labeled "TIME-OUT," which means that a predetermined count of NO loops to Step S14 has occurred. In this case, the process proceeds to Step S20"** or **"no movement is detected in a predetermined time a TIMEOUT occurs and process branches to Step S20"**. The "NO" decision resulted from "MOVING OBJECT DETECTED" step as clearly indicated in figure 3 is not a pre-conditioned step for "IS TIME OUT ABNORMAL?" step as

Art Unit: 2621

argued but it is a completely separate step or that the "IS TIME OUT ABNORMAL?" step is part of the "NO" decision resulted from "MOVING OBJECT DETECTED" step and that is the reason why the claims are rejected as failing to comply with the enablement requirement.

The claims recite among other, limitation of "a determining unit determining said trigger signal as a valid signal when no change is detected in images in said detector within a predetermined time from the input of said trigger signal to said signal input unit". The claims clearly use a "NO" when checking "MOVING OBJECT DETECTED" as a pre-conditioned step for further checking "IS TIME OUT ABNORMAL?". It is further noted that the paragraph 0044-0051 are used to described the flowchart of figure 3; and specifically, paragraph 0046 is unclear at best. In conclusion since there is nothing in the original disclosure shows that a "NO" when checking "MOVING OBJECT DETECTED" is a pre-conditioned step for further checking "IS TIME OUT ABNORMAL?", the examiner maintains his rejections.

With regard to the applicants' arguments that: "In contrast to the cited references, claim 20 includes: a determining unit which determines said trigger signal is an invalid signal when said detector detects a change in the images within a predetermined time period between a first time from the input of said trigger signal to said signal input unit and a second time subsequent to said first time, and determines said trigger signal is a valid signal when said detector detects a change in images before said first time or after said second time; ...

Gutta does not provide any operational description of any detection process other than to say that classifier 510 is trained to do so (5:14-49). **Gutta does not describe any particular trigger signal**, though it describes many sensors that may be programmed to produce trigger signals with the assistance of hindsight and the teachings of applicants' specification. However, there is no teaching or suggestion in Gutta of a "detector [that] detects a change in the images within a predetermined time period between a first time from the input of said trigger signal to said signal input unit and a second time subsequent to said first time, and determines said trigger signal is a valid signal when said detector detects a change in images before said first time or after said second time." As described in applicants' specification in ¶¶ [0048] and [0049], this type of detector allows for discriminating between normal activity and abnormal activity: [0048] For example, when the detection sensor 100 is attached as a door sensor so that the camera unit 10 captures images in the vicinity of a passage connecting to the door, the period of time from the opening of the door until the time at which a certain person has passed through the passage tends to fall within a predetermined range in a normal case. In contrast, in the case of a suspicious intruder, the intruder tends to walk faster than the normal walking speed or walk very slowly, with the result that the period of time from the opening of the door until the time at which the person has passed through the passage does not fall within the predetermined range in some cases.

[0049] For this reason, when the period of time (T1-T0) from the input of the trigger signal by the detection sensor 100 to the detection of the moving object falls within a predetermined range, the signal determination unit 33 determines that the

Art Unit: 2621

trigger signal is derived from not the detection of an abnormal state, but the detection of a normal state, and recognizes the inputted trigger signal as an invalid signal (step S18). In contrast, when the period of time (T1-T0) from the input of the trigger signal by the detection sensor 100 to the detection of the moving object does not fall within a predetermined range, it determines that the trigger signal is derived from the detection of an abnormal state, and recognizes the inputted trigger signal as a valid signal (step S21).

Gutta does not describe any detection process, much less the detection process in the above-quoted section of claim 20. To anticipate, a reference must show, expressly or inherently, every limitation of the claim. MPEP § 2131. Therefore, claim 20 is not anticipated by the cited references. Claims 21-28 are dependent upon claim 20, and thus include every limitation of claim 20. Therefore, claims 21-28 are also not anticipated by the cited references.

Also in contrast to the cited references, claim 29 includes, determining said trigger signal is an invalid signal when a change in images is detected within a predetermined time period between a first time from the input of said trigger signal and a second time subsequent to said first time, and determining said trigger signal as a valid signal when a change in images is detected before said first time or after said second time;

As noted above, Gutta does not describe any detection process, much less the detection process in the above-quoted section of claim 29. Therefore, the cited references do not anticipate claim 29. Also in contrast to the cited references, claim 30

Art Unit: 2621

includes, determining said trigger signal is an invalid signal when a change in the images is detected within a predetermined time period between a first time from the input of said trigger signal and a second time subsequent to said first time, and determining said trigger signal is a valid signal when a change in images is detected before said first time or after said second time;

As noted above, Gutta does not describe any detection process, much less the detection process in the above-quoted section of claim 30. Therefore, the cited references do not anticipate claim 30. Claims 31 and 32 are dependent upon claim 30, and thus include every limitation of claim 30. Therefore, claims 31 and 32 are also not anticipated by the cited references.”.

The examiner respectfully disagrees. It is submitted that Gutta et al in column 3, lines 16-19 discloses conditions classes for a suitable monitor system may include events such as **trigger by** a breathing sensor, **motion sensor**, or audio sensor in prior art devices and it is further submitted that motion sensor operates when temporal pictures are compared to detect changes and when changes exceeds a predetermined threshold, it trigger an alarm signal. Further more, in column 3, lines 26-28, Gutta et al defines during a time other than a previously defined time (predefined time T0-T1, so other time falls outside the range or falls before T0 or after T1), if there is lack of normal movement or there is an abnormal movement such as rapid movement (which will be detected by motion sensor, i.e. successive pictures are compared to detect changes), this will be one of the scenario that triggers an alarm signal. Having answered all arguments, the examiner maintains his rejections.

With regard to the applicants' argument that: "There is no suggestion of a trigger signal in the 41000 reference. The cameras operate continuously (Page 2, lines 1-5). Furthermore, there is no suggestion of detecting "a change in the images within a predetermined time period." Both cameras take still images. These images are compared to see if the same vehicle is present. There is not attempt to detect movement at either camera. Because there is no suggestion of these limitations, they would not have been obvious to one of skill in the art from the reference.". The examiner respectfully disagrees. It is respectfully submitted that the upper limit of vehicle speed in a predetermined zone is considered a threshold to trigger an alarm signal. Having answered all arguments, the examiner maintains his rejections.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 29 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claim 29, lines 1-3, which recites " A computer readable medium ...". The original application (specifications, drawings and claims) does not disclose "A computer readable medium as claimed and therefore, claim 29 contains subject matter which was not described in the specification in such a way as to

Art Unit: 2621

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

3. Claims 1, 3, 4, 6-8, 10-11, 16-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 1 (similarly claim 16) recites a determining unit which determines said trigger signal is **a valid signal** when said detector detects **no change in the images** within a predetermined time from the input of said trigger signal to said signal input unit. Since as indicated in figure 3 of the present application, step S15 is checked to see if 1) moving object detected OR time-out and it is clearly shown (feed back loop to step S14), when there is NO moving object detected, there is only one option and it is to return to step S14, there is nothing in figure 3 that shows when there is NO moving object detected, go to step S20 as argued and the present specification uses different criteria to go the step S20 not to use motion object detection step. Therefore, claims 1, 3, 4, 6-8, 10-11, 16-18 contain subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
4. Claims 1, 3, 4, 6-8, 10-11, 16-18 are rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a specific or substantial asserted utility or a well established utility.

Claim 1 (similarly claim 16) recites a determining unit which determines said trigger signal is **a valid signal** when said detector detects **no change in the images** within a predetermined time from the input of said trigger signal to said signal input unit. Since as indicated in figure 3 of the present application, step S15 is checked to see if 1) moving object detected OR time-out and it is clearly shown (feed back loop to step S14), when there is NO moving object detected, there is only one option and it is to return to step S14, there is nothing in figure 3 that shows when there is NO moving object detected, go to step S20 as argued and the present specification uses different criteria to go the step S20 not to use motion object detection step. Therefore, claims 1, 3, 4, 6-8, 10-11, 16-18 contain subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 20-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Gutta et al (US 6,968,294 B2). Gutta et al discloses an automatic system for monitoring

Art Unit: 2621

person requiring care and his/her caretaker comprising the same control device for carrying out a predetermined process in response to a trigger signal, comprising:

a signal input unit configured to receive said trigger signal (figure 1, el. 141, 100 and col. 5, ln. 1-14);

a detector configured to receive continuous images from an image capturing unit and to detect a change in the images by analyzing the images obtained from said image capturing unit (col. 3, ln. 26-28: rapid movement detected as differences between two image frames exceed threshold);

a determining unit which determines said trigger signal is an invalid signal when said detector detects a change in the images within a predetermined time period between a first time from the input of said trigger signal to said signal input unit and a second time subsequent to said first time, and determines said trigger signal is a valid signal when said detector detects a change in images before said first time or after said second time (col. 3, event # 5: abnormal condition occurs when an infant or a child being picked up at a time other than a previously defined time (outside T0 and T1)); and

a controller carrying out a predetermined process when said trigger signal is determined as a valid signal by the determining unit (figure 1, speaker 114) as specified in claims 20, 29-30; wherein said signal input unit is connected to a sensor which generates said trigger signal (fig. 1, 135, 136, 305, 100, 141) as specified in claim 21; wherein said sensor unit detects an intruding object into a predetermined monitoring area from which the continuous images are captured by said image capturing unit (proximity sensor) as specified in claim 22; said detector detects whether or not any

Art Unit: 2621

moving object exists in each of the continuous images in an image stream that continues in time series (col. 3, event #1. motion sensor) as specified in claims 23 and 31; wherein said controller carries out different processes between a case where said trigger signal is determined as an invalid signal by said determining unit and that where said trigger signal is determined as a valid signal by said determining unit (event #5, an infant or a child being picked up at a predetermined time, no action otherwise, send signal to sound speaker) as specified in claim 24; further comprising: a recorder recording the continuous images obtained from said image capturing unit, wherein said controller controls said recorder so as to record the continuous images obtained from said image capturing unit when said determining unit determines said trigger signal as a valid signal (col. 11, ln. 18-31) as specified in claims 25 and 32; wherein when said trigger signal is determined as a valid signal by said determining unit, said controller outputs a signal used for activating an external apparatus connected to the control device (fig. 1, el. 141-100-114) as specified in claim 26; further comprising: a sound-data storage unit storing sound data, wherein when said trigger signal is determined as a valid signal by said determining unit, said controller generates sound based upon sound data stored in said sound-data storage unit (col. 11, ln. 18-31 and fig. 1, el. 114) as specified in claim 27; further comprising: a communication unit carrying out data communications with an external apparatus, wherein when said trigger signal is determined as a valid signal by said determining unit, said controller allows said communication unit to output information indicating the result of determination to said external apparatus (fig. 1, el. 141-100-114) as specified in claim 28.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 20, 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent Application 63-041000 (1998).

Application 63-041000 discloses a vehicle speed measurement device (controller) comprising: a signal input unit configured to receive the trigger signal (signal inputting means/external sensor) capturing the image of a vehicle (inputting a trigger signal); image capturing means (image inputting means); image processing device (detector) identifying (detecting) a running vehicle (moving object) by carrying out an image process on images (continuous images) of first and second video cameras; and running speed determining means determining whether the vehicle exceeds a speed (whether the trigger signal is a valid signal), wherein the determining means determines that the vehicle does not exceed the speed (invalid) when a difference in image capturing time between the first and second television cameras is greater than the time of a established speed (first value), and determines that the vehicle exceeds the speed (valid) when the difference is smaller than the time of the established speed (see especially page 2, line 9 of the upper-left column to line 12 of the lower-right column, Fig. 1). Since it is imperative to establish the upper limit value (second value) for the image capturing time difference that is used in determining that if the vehicle exceeds

Art Unit: 2621

the speed or not, it would have been obvious at the time the invention was made to modify the system of Application 63-041000 by establishing an upper limit to determine if the vehicle exceeds the limit or not.

Further, Application 63-041000 discloses that the vehicle speed measurement device includes: (1) a memory and means for not erasing the memory when determined that the vehicle exceeds the speed (recorder and controller that renders the recorder so as to record the continuous images obtained from the image inputting means, when the determining means determines the trigger signal as a valid signal); and (2) means for carrying out data communications with a display controller and transmitting a control signal to the display controller when determined that the vehicle exceeds the speed (communicating means for carrying out data communications with an external apparatus and, when the determining means determines the trigger signal as a valid signal, a controller allowing the communicating means to output information indicating the result of determination to the external apparatus).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T. Diep whose telephone number is 571-272-7328. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ND

/Nhon T Diep/
Primary Examiner, Art Unit 2621